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Donald M. Pangrazio

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EXAMINER

DICKERSON, CHAD S

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/759,638	Applicant(s) PANGRAZIO ET AL.	
	Examiner CHAD DICKERSON	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/12/2010 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 16 and 17 have been considered but are moot in view of the new ground(s) of rejection. The Amendment to the claims necessitated the new grounds of rejection. However, the same references applied in the last Office Action are being applied below. The additional claim limitations added in the recent amendment are disclosed in the background of the invention. The references of Murren '085 discloses synchronizing data that represents hard copy flyers with a plurality of sites or that represent the individuals that are interested in that information and provide the aspect of printing out this information¹. In addition, the updating of the respective sites or addresses interested in the information are done in an instantaneous manner since modern technology allows for information to be

¹ See Murren '085 at ¶ [0020]-[0023].

communicated to different entities in a quick manner through networking equipment².

Therefore, in view of the brief explanation above and the previously applied references, the Examiner maintains the rejection of the claims below.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1 and 16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification contains no reference to a multicast communication transport layer that is able to facilitate multi-site print load balancing. The print server gauges the print load balancing on the respective sites and decides whether to send jobs to these sites for output as disclosed in Applicant's specification in paragraph [006]. In addition, Applicant's specification does not disclose facilitating load balancing through the synchronization of print service sites. Therefore, the subject matter claimed does not comply with the written description requirement.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

² Id. at ¶ [0002].

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim language of “a multicast communication transport layer to facilitate multi-site print load balancing” renders the claim indefinite. Is the intent of this language to have the multi-cast communication layer perform multi-site load balancing, which is the function of the print service CPU?

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murren '085 (US Pub No 2003/0110085) in view of Marks '374 (US Pub No 2002/0007374) and the background of the invention.

Re claim 1: Murren '085 discloses maintaining synchronization of information published to multiple subscribers, comprising:

publishing document library subject availability via multicast communication over a data network (i.e. in the system of Murren '085, the tracking component (106) publishes the availability of information within a subscribers criteria via a publishing

component (110). This is not only given to a certain user, but to multiple users requesting the information. When updates occur to information within the user's criteria, multiple users' are notified by the publishing of the information to the users. Publishing is interpreted as the dissemination of information to the public. Since the updates and the requesting of information within a user's criteria occurs over a network that notifies multiple user's at the same time, the system is considered to perform multicast communication, which is when multiple clients receive the same information from one server; see fig. 1; paragraphs [0006]-[0025])

wherein said subject availability is predefined (i.e. in the system of Murren, the different keywords or items available online have a predetermined length of time that the items are to be subscribed to by a subscribers. Also, the actual information that is used to identify the item is predetermined; see ¶ [0016]-[0025]);

receiving subscriptions for document library subjects via point-to-point data communication over the data network from remote subscribers at individual sites (i.e. the subscribers (104) in the overall system support the World Wide Web and web pages. The subscribers can be considered a site since they receive information using the Internet and the system automatically sends information to the designated user using the web and web pages. The subscriber is able to subscribe to the system (102) to receive different types of information from the publication and tracking systems. This information is received on the network used in the overall system to the subscribers at their respective locations on the network. The information received is information regarding the subject matter that fits inside the subscribers desired criteria. The

information relating to the subscribers criteria and information related to other criteria, or subjects, are stored on the system (102); see fig. 1; paragraphs [0006]-[0025])

wherein said subscriptions comprise a configuration file that functions as a lookup table for subjects subscribed to by said subscribers (i.e. in a lookup table, a value that is input yields a value that is output. Within the Murren reference, the user inputs in a criteria, whether that criteria involves multiple subjects or one subject, and with the input of this criteria, the system maps this criteria to items that correspond with this criteria. In addition, the system maps the user to the information that is requested through the listed criteria. Therefore, with the user being associated with the subjects requested and the subjects being associated with the input criteria, the above feature is performed; see fig. 6, ¶ [0020]-[0025] and [0048]-[0052]);

maintaining a records of subscriber data, subject data and publication-subscription logs utilizing a publish-subscribe middleware wherein said publish-subscribe middleware enables at least one server and at least one database to operate together for management of said records (i.e. the server (102) is used with the tracking component (106), which serves as a database, and these components maintain records of a subscriber (606) and a publication-subscriber log of multiple subscribers (608). The date range is considered the publication-subscriber log because the information lists the time a subscriber subscribes to a publication on the network. The item identifier is considered as subject data since this information identifies an item that is subscribed to. Also, in figure 5, the input criteria entered by the subscriber can be stored in a dedicated area of the publishing component (110), which is accessed by the server device (102).

This information can be considered as subject data. Since the server (102) operates together with the information tracking component (106), which contains a database, that store the above types of information together, the system can be considered to have publish-subscribe middleware; see figs. 1-6, paragraphs [0047]-[0056]);

instantaneously, at time of repository change, synchronizing data representative of a document with remote subscribers at individual sites over the data network (i.e. once changes are made to the database storing the information regarding the interested subscribers, the information is propagated out, via the publication component (110) to the various subscribers (104) who may be affected by the change in information. All subscribers that are concerned with the information that is subscribed to be notified of the change in the information related to their criteria. The information relating to the criteria and with the multiple subscribers is synchronized with the subscribers since one of the improvements of this invention is to maintain synchronization of information publication to multiple subscribers; see fig. 1; paragraphs [0005]-[0025]); and

printing said document at said individual sites (i.e. in the system, the individual subscribers are able to make hard copy flyers of the information received from the network. Each subscriber represents a site in which the document is received; see ¶ [0023]).

However, Murren '085 fails to teach a data network using a multicast communication transport layer and wherein communication is all accomplished via multicast to subscribers by publisher enterprise equipment.

However, this is well known in the art as evidenced by Marks '374. Marks '374 discloses a data network using a multicast communication transport layer (i.e. it would have been obvious to one of ordinary skill in the art to combine the references of Murren and Marks since both involve the transmission of documents or other information to individuals subscribing to the information on a network (same field of endeavor). In the system, the network operations center (130) contains a multicast server (390) that is able to send documents or files to directories on predefined local servers. The Internet protocol using the IP multicast protocols is considered as the multicast communication transport layer since the IP multicast protocols, like the claim feature, is used to send information from one point to many destinations on the network; see figs. 1 and 3; paragraph [0042]); and

wherein communication is all accomplished via multicast to subscribers by publisher enterprise equipment (i.e. in the system, a response to a unicast request is a multicast response to multiple users. If multiple users are associated with a document, then all of these users are contacted through the multicast communication method; see ¶ [0002] and [0007]-[0009]).

Therefore, in view of Marks '374, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of a data network using a multicast communication transport layer and wherein communication is all accomplished via multicast to subscribers by publisher enterprise equipment, incorporated in the device of Murren '085, in order to have a one-to-many transmission

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protocols used in the transmission of data within the Murren '085 system (as stated in Marks '374 paragraph [0042]).

However, the references of Murren and Marks fail to teach to facilitate multi-site print load balancing, managing source page description language (PDL) and storing decomposed PDL files as bitmapped files of said print ready document for consistent print results, management and use of said print-ready document.

However, this is well known in the art as evidenced by the background of the invention. The background of the invention discloses to facilitate multi-site print load balancing (i.e. the background of the invention uses a print service that makes a decision to for information to sites based on the balance of the loads on the sites that are being processed, or multi-site load balancing. Since the background discloses this feature, the claim limitation is performed; see ¶ [0006]-[0009]),

managing source page description language (PDL) and storing decomposed PDL files as bitmapped files of said print ready document for consistent print results, management and use of said print-ready document (i.e. in paragraph [005], the system contains workstations that are able to communicate information to be printed to a printing device. Since the background of the invention sends information over a network to other devices, then the background is viewed as similar to the other applied references above (same field of endeavor). Also, the background of the invention discloses already print formatted master documents that may be transmitted to a printer directly, which eliminates a need to repeat conversion and decomposition process of another copy if desired. In addition, the master file can be stored at a file service that

can manage and store the bitmapped image data along a user obtaining this stored image data for use at a later time; see paragraphs [0003]-[0009]).

Therefore, in view of the background of the invention, it would have been obvious to one of ordinary skill at the time the invention was made to a print-ready document, incorporated in the device of Murren, as modified by the features of Marks, in order to eliminate the need to repeat the conversion or decomposition process if another copy of the document is needed or to save on processing resources of the received data (as stated in background of the invention paragraph [005]).

Re Claim 16: Murren '085 discloses a system for managing distributed multi-site Print Ready Document libraries comprising:

- at least one database (i.e. the information tracking component contains a database; see ¶ [0017]);

- at least one document library wherein documents are assigned to predefined topics stored within said at least one database (i.e. the documents are stored in the system and criteria used to describe the items on the database is predetermined before users are able to receive the subscribed to information; see ¶ [0016]-[0025]);

- a data network configured to publish availability of said predefined topics to a plurality of print service sites wherein said print service sites subscribe to at least one of said predefined topics (i.e. in the system of Murren '085, the tracking component (106) publishes the availability of information within a subscribers criteria via a publishing component (110). This is not only given to a certain user, but to multiple users

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requesting the information. When updates occur to information within the user's criteria, multiple users' are notified by the publishing of the information to the users. Publishing is interpreted as the dissemination of information to the public. Since the updates and the requesting of information within a user's criteria occurs over a network that notifies multiple user's at the same time, the system is considered to perform multicast communication, which is when multiple clients receive the same information from one server. Also, since the sites that are used to receive the data are able to make hard copy flyers that are used to describe the published information, these sites can be considered as print service providers since they provide the service of printing to those located at the specific site; see fig. 1; paragraphs [0006]-[0025]) utilizing a configuration file conveyed over said data network (i.e. in a lookup table, a value that is input yields a value that is output. Within the Murren reference, the user inputs in a criteria, whether that criteria involves multiple subjects or one subject, and with the input of this criteria, the system maps this criteria to items that correspond with this criteria. In addition, the system maps the user to the information that is requested through the listed criteria. Therefore, with the user being associated with the subjects requested, the user determines that the above feature is performed; see fig. 6, ¶ [0020]-[0025] and [0048]-[0052]);

at least one server configured to access said predefined topics stored within said at least one database (i.e. the information tracking and publication system is a server that accesses the different items within the subscribers predefined criteria or topics; see ¶ [0016]-[0022]);

enterprise communication equipment comprising a router and a network access device utilizing a communication transport layer configured to automatically send documents to said plurality of print service sites in accordance with said predefined topics that each of said plurality of print service sites subscribed to (i.e. in the system, the use of the internet and directing certain publications to certain users involves the clear use of a router and a device that accesses a network, such as a WAN or LAN. In the system, when a change has occurred to a document or when a new item has been placed on the database that fits within criteria or a topic that has been input by a user, the system automatically sends the documents within the input criteria to the sites of the subscribers. Once the subscribers receive this information, they may be able to print this information out and provide it to other users who are concerned with the published information. The Marks reference also discloses routers in paragraph [0029]; see ¶ [0023] and [0052]-[0054]);

instantaneously synchronizing data representative of said print-ready document with said plurality of print service sites over the data network (i.e. once changes are made to the database storing the information regarding the interested subscribers, the information is propagated out, via the publication component (110) to the various subscribers (104) who may be affected by the change in information. All subscribers that are concerned with the information that is subscribed to be notified of the change in the information related to their criteria. The information relating to the criteria and with the multiple subscribers is synchronized with the subscribers since one of the improvements of this invention is to maintain synchronization of information publication

to multiple subscribers. Since these subscribers can print the received information into hard copy flyers, the different subscribers can print the information at their respective location, which is a site on the network; see fig. 1; paragraphs [0005]-[0025]);

publish-subscribe middleware configured to enable said at least one server to operate in conjunction with said at least one database in order to manage subscriber data, topic data and publication-subscription logs (i.e. the server (102) is used with the tracking component (106), which serves as a database, and these components maintain records of a subscriber (606) and a publication-subscriber log of multiple subscribers (608). The date range is considered the publication-subscriber log because the information lists the time a subscriber subscribes to a publication on the network. The item identifier is considered as subject data since this information identifies an item that is subscribed to. Also, in figure 5, the input criteria entered by the subscriber can be stored in a dedicated area of the publishing component (110), which is accessed by the server device (102). This information can be considered as subject data. Since the server (102) operates together with the information tracking component (106), which contains a database, that store the above types of information together, the system can be considered to have publish-subscribe middleware; see figs. 1-6, paragraphs [0047]-[0056]);

at least one rendering device located at each of said print service sites configured to render said documents (i.e. in the system of Murren, a site is able to provide a hard copy of the subscribed to information and provide this hard copy to other concerned with this information. Since this information can be printed with a printing

device, the subscribers contain rendering equipment used to output subscription information; see ¶ [0023]).

However, Murren '085 fails to teach network access device utilizing a multicast communication transport layer, wherein communication is accomplished via a multicast to subscribers by publisher enterprise equipment.

However, this is well known in the art as evidenced by Marks '374. Marks '374 discloses network access device utilizing a multicast communication transport layer (i.e. the references of Murren and Marks involve the transmission of documents or other information to individuals on a network (same field of endeavor). In the system, the network operations center (130) contains a multicast server (390) that is able to send documents or files to directories on predefined local servers. The Internet protocol using the IP multicast protocols is considered as the multicast communication transport layer since the IP multicast protocols, like the claim feature, is used to send information from one point to many destinations on the network; see figs. 1 and 3; paragraph [0042]),

wherein communication is accomplished via a multicast to subscribers by publisher enterprise equipment (i.e. in the system, a response to a unicast request is a multicast response to multiple users. If multiple users are associated with a document, then all of these users are contacted through the multicast communication method; see ¶ [0002] and [0007]-[0009]).

Therefore, in view of Marks '374, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of network access device

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utilizing a multicast communication transport layer, wherein communication is accomplished via a multicast to subscribers by publisher enterprise equipment, incorporated in the device of Murren '085, in order to have a one-to-many transmission protocols used in the transmission of data within the Murren '085 system (as stated in Marks '374 paragraph [0042]).

However, the references of Murren and Marks fail to teach to further facilitate multi-site print load balancing, managing source page description language (PDL) and storing decomposed PDL files as bitmapped files of said print ready document for consistent print results, management and use of said print-ready document.

However, this is well known in the art as evidenced by the background of the invention. The background of the invention discloses to facilitate multi-site print load balancing (i.e. the background of the invention uses a print service that makes a decision to for information to sites based on the balance of the loads on the sites that are being processed, or multi-site load balancing. Since the background discloses this feature, the claim limitation is performed; see ¶ [0006]-[0009]),

managing source page description language (PDL) and storing decomposed PDL files as bitmapped files of said print ready document for consistent print results, management and use of said print-ready document (i.e. in paragraph [005], the system contains workstations that are able to communicate information to be printed to a printing device. Since the background of the invention sends information over a network to other devices, then the background is viewed as similar to the other applied references above (same field of endeavor). Also, the background of the invention

discloses already print formatted master documents that may be transmitted to a printer directly, which eliminates a need to repeat conversion and decomposition process of another copy if desired. In addition, the master file can be stored at a file service that can manage and store the bitmapped image data along a user obtaining this stored image data for use at a later time; see paragraphs [0003]-[0009]).

Therefore, in view of the background of the invention, it would have been obvious to one of ordinary skill at the time the invention was made to a print-ready document, incorporated in the device of Murren, as modified by the features of Marks, in order to eliminate the need to repeat the conversion or decomposition process if another copy of the document is needed or to save on processing resources of the received data (as stated in background of the invention paragraph [005]).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Barger '352 (US Pub No 2004/0003352) discloses a system where users' subscribe to activity regarding a document of interest and receive notifications when the document of interest is changed.

11. Vogt '349 (USP 6611349) discloses a system for printing and publishing that is able to transmit in the system a plate-ready file, which is used for printing a document using a plate. This is analogous to a print ready document as well.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAD DICKERSON whose telephone number is (571)270-1351. The examiner can normally be reached on 9:30-6:00pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Haskins can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. D./
/Chad Dickerson/
Examiner, Art Unit 2625

/Twyler L. Haskins/
Supervisory Patent Examiner, Art Unit 2625